Public Works Department

Surveillance Enforcement and Billing Sewer Maintenance 1216 W. Nichols Springfield, MO 65802

Phone: 417/864-1923 Fax: 417/864-1918



Date:	8/6/9	9 Fax #: _	8773	
To:	Bin	APPLEGATE	KOU Edding	TON
From:	R -	Lymon"	KOU Eddine	
Message: _	AOU	UPDATE!	- R	
	_ 2		7 \-	
Pages to fo	ezow:			



To: KARL BARKE Of: AIR QUARITY

1499 Fax:

Phone: 1086

3, including this cover sheet. Pages:

9/6/99 Date:

FYI

From the desk of...

J. Randall Lyman Pretreatment Cooordinator City of Springfield, Mo. 1216 W. Nichols St.

> Springfield, Mo. 65802 phone 417-864-1487 fax 417-864-1918

3326 W. GRan

Memo

To: Randy Lyman

From: Bob Corson Date: August 6, 1999

Subject: 3326 W. Grand

On this date at 9:30 am I met with Karl Barke and Ron Boyer of the Springfield-Greene County Health Department at 3326 W. Grand. We met with the renter, Kevin Prange, who advised us that since our last inspection City Utilities had removed his gas meter. We proceeded to inspect the basement by first removing the sheet of plywood covering the stairwell and then entering the basement.

To test the atmosphere in the basement I used the phD Ultra Atmospheric Monitor. As we entered the basement I observed the meter for changes in the readings. After a approximately one minute the oxygen reading began to fall from 20.9% to the 19.9%/20.0% range. The oxygen reading remained in this range during our stay in the basement. All other parameters continued the have zero readings. To check to see in the atmosphere could support combustion Mr. Barke lit a bic lighter at floor level next the "drain" in the floor. The lighter stayed lit. Karl moved the flame over by the water heater and it remained lit. We removed the taped plug from the "drain" and placed the lit lighter in the mouth of the "drain". The lighter stayed lit but there appears to be a draft coming for the "drain" and the flame flickered. We tested the atmosphere in the "drain" and the oxygen reading fell to 17.7%. The "drain" appears to be a hold in the floor which opens to the ground under the basement floor. There appears to be a small opening in the ground below the "drain" but no drain pipes were observed.

Mr. Boyer advised the renter that he should seal the "drain" with concrete. Mr. Prange said that he would do it today. Mr Boyer indicated that we would be back Monday morning the check the atmosphere.

dioxide (CO_2) is 50,000 part per million. The Fire Dept. apparently monitored a 4%-5% CO_2 reading with Drager® tubes; this would be 40,000-50,000 parts per million.

I have discussed the situation with Bob Schaefer, Asst. Director of Public Works, and Ed Malter, Supt. of Sanitary Service, and they feel that Public Works has done everything that within it's scope relating to the problem. The problem does not appear to be associated with the City sewer system. Pursuant to the City's current standard operating procedure for handling these situations, I am forwarding a copy of this summary to the Health and Fire Departments for any further resolution.

August 6, 1999 (1:39PM)-I just finished a conversation after receiving a phone call from Mr. Collier in Lousiana. He wanted an update on the problem at his property at 3326 W. Grand. I told him that I had mailed a copy of our information to him yesterday and that he would probably not receive it for a day or two. I summarized the information to him over the phone and told him that Karl Barke, Ron Boyer, and Bob Corson were at 3326 W. Grand this morning and the environment in the basement had apparently improved to the point they could survey and inspect it thoroughly. No source for the former 'dead air' condition could be determined. They suggested to the renter, Mr. Kevin Prange, that he get a bag of concrete and seal the hole, formerly referred to as the 'drain' and they would come back on Monday the 9th of August and check the basement environment again. After removing the foam and duct tape that the Fire Dept. had placed over the hole, Bob Corson said they did not think it is a 'drain' or a 'pipe' leading to a septic tank, but there appeared to be kind of a void in the ground beneath the floor of the basement. Mr. Prange indicated he would cement the hole over the weekend. I told Mr. Collier that he should probably check with Mr. Barke in the early part of next week to determine the status of the problem. Mr. Collier wanted to know when the gas service could be restored. I told Mr. Collier that I suspect if everything checks out to be alright on Monday, that the Health Dept. might recommend that City Utilities restore the gas service to this address. The renter said they cook with electricity; gas is for hot water for dishwashing and bathing. A copy of Bob Corson's memo regarding their visit earlier today is attached.

C:\MyFiles\3326WGRAND.wpd

3326 W. GRand

interoffi e MEMORANDUM

To:

Bob Corson, Pretreatment Inspector

From:

Randy Lyman, Pretreatment Coordinator

Subject:

Oxygen Deficiency/Carbon Dioxide Readings

Date:

July 29, 1999 (10:12AM)-August 5, 1999 (8:35AM)

Re:

3326 W. Grand

CC:

Steve Strader-Fire, Karl Barke-Health, Bill Applegate-City Utilities, Ed Malter,

Bob Schaefer, Wayne Latimer, Bob Corson, file

July 29, 1999 (10:12AM)-I received a call from Karl Barke of the Health Dept. this morning indicating that yesterday evening he had talked with Bill Smart of the Fire Dept. HazMat team and Ken Eddington with C.U. Gas Dept. regarding an odor call at 3326 W. Grand. Fire Marshal Bill Carpenter was also mentioned by Karl B. as being involved. Apparently a basement drain at this address had an oxygen reading of 17.5% and a CO₂ reading of 4%-5%(Drager® tubes) as taken by the Fire Dept. I understand that the Fire Dept. flushed the drain with water but indicated a 'plume' of air appeared to emanate from the drain, as if a 'draft' is created. C.U. could not get the pilot light on a water heater to light, nor could they get a match to stay lit, apparently from oxygen deficiency in the basement from the waist down. I checked all resources immedieatley available to me and found no indication of a permit for this address to connect to the sewer. I checked with Jackie Haynes and we could find no information regarding I/I records, dye tests, television inspection, smoke tests, or anything giving any indication of connection to the sewer. This address is on sewer billing, however. David Duffield checked the original paper copies of special permits at the Busch Bldg. and found a \$50 special connect permit was issued on 8/11/70. Our database had an incorrect house number for this address; it is now corrected to reflect the 3326 W. Grand address. This structure is a rental property apparently and the occupant has five small children residing there. The Fire Dept. used duct tape or other materials to try to seal the drain and supposedly nailed the basement door shut to keep the children from entering the basement. We need to determine if it is connected to the sewer and, if so, what needs to be done to keep sewer gasses from entering this structure. Please keep Karl Barke (864-1086) and Ken Eddington of the Gas Dept.(831-8394) apprized of the situation. Karl B. asked for us to take any readings for components of sewer gas with our available instruments and let him know the results. Mr. Eddington indicates they need to get the gas service back on at this address as soon as possible so the occupants can wash dishes and resume bathing. Mr Eddington indicated he is

3326 W. GROND

apparently trying to keep the occupant calm so she will not contact the news media regarding this situation. Please handle as expeditiously as possible so as to avoid any media exposure. You will probably have questions and want to discuss before proceeding.

July 29, 1999, Late Afternoon-I talked with Mr. Eddington at C.U. and informed him that we had dyed and smoked the house at 3326 W. Grand and basically gave him all the information included in Bob Corson's memo regarding his inspection. I asked him what the original call or complaint was relating to. He said their involvement was related to the fact that the water heater pilot light would not stay lit. They have had about three service calls at this address for the same problem and then found that a match would not stay lit due to oxygen deficiency in the basement where the furnace and water heater are located.

<u>July 30, 1999</u>-a.m.-Ken Eddington said he had searched their computer records and found that C.U. had not had any service calls relating to this same type of problem at this address. I called Mr. Eddington and informed him of other conversations I have had that are discussed in this memo.

July 30, 1999 (3:35PM)-Karl Barke called me right after lunch and wanted me to call the owner of the house, Mr. Robert W. Collier, M.D., 119 N. 12th St., Oakdale, La. 71463-2638 at 318-335-9044. I informed Karl B. of all the information available at that time. Mr. Barke said we should determine what the 'drain' pipe is in the floor of the basement or where it terminates. I indicated that I did not know if we can make that determination. Shortly after Karl and I talked, Mr. Collier had called Karl back and was transferred to me. I informed Mr. Collier of our findings relating to the sanitary sewer dyeing, smoking, etc. I asked him for his permission for us to televise his building sewer and see if we can tell what may be wrong with the line because it did not smoke or dye as it normally should. He said to go right ahead and let him know what we find. He said he paid Sater Sewer Service \$150 about 8 months ago to rod out the sewer and thought it took care of that problem. I told him that if the building sewer has a break, sag, offset joint, etc. that it could stop up rather quickly again. Mr. Collier said someone had suggested to him that the air problem in the basement could be coming from the Westside Optimist ball field to the east of his property that was constructed on an old landfill. He had been told that the rocks in the ground may shift and allow, what I think he was referring to as landfill gasses, to migrate onto his property. He asked if we could determine if that may be the cause. I told him that our responsibility relates to the City sanitary sewer and that I am probably not as qualified as one should be to address that question, but that I would discuss it with my superiors and we may forward that question to the appropriate qualified parties. Mr. Collier indicated that he wants to be apprized of what we find out. He said he can be reached at a pay phone in a senior citizen center in Oakdale, La. where he has lunch between 11:25 and 11:40 a.m., Monday through Friday. He said no messages can be left, but if he is there when you call, someone will locate him and tell him that someone is on the phone for him. He said the mail is a more efficient way to communicate with him.

July 30, 1999 (4:48PM)-Bob Corson and Tom Shaw of the sewer department went to the 3326 address this afternoon. They televised and tape recorded the building sewer line from the manhole upstream about 80 feet and could go no further, probably where it makes a bend near or under the house. They saw no obstruction, but the camera went under water 2-3 times where large swags appear to be in the line. This would indicate that sewer gasses and the smoke injected into the sewer yesterday cannot find a way into the house or the basement of the structure via the building sewer connection. The smoke or sewer gasses normally cannot penetrate water in a submerged pipe flow condition; it acts like a trap on a drain is designed to work. No determination was made as to what the 'drain' in the basement connects to or where it terminates or originates.

August 2, 1999 (8:50AM)-I called Ken Eddington of C.U. and brought him up to date on what was determined up to this point. I called Karl Barke of the Health Dept. and informed him as well. Mr. Barke wanted to know if we have determined what the 'drain' in the basement connects to or where it terminates or originates; he indicated that he feels that this is the main question that now needs to be answered to determine the cause of the bad air in the basement. I told him that we have not made a determination and I do not know if we will be able to make that determination.

August 2, 1999 (9:39AM)-I called Tom Shaw of our I/I section and asked if he could talk to his father who owned this property and took out the permit to connect to sewer in 1970 and determine if he remembered what the 'drain' in the basement connected to. Tom called his father and mother and called me back. Tom said that his mother and father could not specifically remember a 'drain' in the basement. They indicated they disconnected the sewer plumbing *in the house* from the septic system and rerouted it to a new building sewer that was connected to the sanitary sewer on the east side of the house. They indicated the septic tank was south of the house and the septic system was not disturbed when they connected to sewer.

I do not know what further involvement the sewer department should have in relation to this complaint or problem nor do I know what City department should be the lead agency at this point. Any further observation, testing, inspection etc. in the basement would require the use of self contained breathing apparatus by a qualified individual or sufficient ventilation of the space to allow safe entry. I will forward a copy of our documentation to my superiors for direction.

August 5, 1999 (8:11AM)-Bill Applegate and Ken Eddington with City Utilities and I have been in contact over the last two or three days. We have been consulting with industrial hygienists in both of our organizations looking for any or all ideas that might lead to a source of the problem in the basement at the 3326 W. Grand address. Neither City Utilities or City Public Works have determined the source of the problem. Public Works best guess is that the 'drain' in question in the basement floor is connected to the old septic tank system tht was reportedly at the rear of the house. Research revealed that the IDLH (Immediately Dangerous to Life and Health) for carbon

dioxide (CO₂) is 50,000 part per million. The Fire Dept. apparently monitored a 4%-5% CO₂ reading with Drager® tubes; this would be 40,000-50,000 parts per million.

I have discussed the situation with Bob Schaefer, Asst. Director of Public Works, and Ed Malter, Supt. of Sanitary Service, and they feel that Public Works has done everything that within it's scope relating to the problem. The problem does not appear to be associated with the City sewer system. Pursuant to the City's current standard operating procedure for handling these situations, I am forwarding a copy of this summary to the Health and Fire Departments for any further resolution.

C:\MyFiles\3326WGRAND.wpd

Memo

To: Randy Lyman

From: Bob Corson

Date: August 9, 1999 **Subject:** 3326 W. Grand

We had agreed on our last inspection, August 6,1999, I would met with Karl Barke on August 9, 1999, to test the atmosphere in the basement after the resident had sealed the "drain" in the basement with concrete. At 9:15 am I met with Karl to inspect the basement.

Once again upon entering the basement the phD Ultra Atmospheric Monitor went into alarm for oxygen. We proceeded to leave the basement to allow the meter to clear. We then reentered the basement and I took reading the following readings:

- 1) eye level, 20.2% oxygen
- 2) waist level, 18.8% oxygen
- 3) floor level, 17.2 % oxygen

All other readings, ie: LEL, CO, H₂S, were zero.

Karl conducted a flame test with his bic lighter. At eye level the flame was normal. At waist level the flame flickered and at floor level the flame flickered and then went out.

Karl talked the Debbie, who lives there, and Karl and I met at Ron Boyer's office were we informed Ron of the results of our inspection.

Ron indicated that he would keep this office informed as to what the health department plans to do in light of the results of Karl's and my inspection of this date.

MISCELLANEOUS

Table 11-10
PROPERTIES OF COMBUSTIBLE MIXTURES

	Flame temperature, °C (stoichiometric mixture) Air Oxygen		Lowest ignition temperature, °C		Flammability limit, % by volume fuel (25°C, 760 mm)				Maximum burning	
Fuel					Air		Oxygen		veloci	velocity, em/se
The state of the s	1		+	Oxygen	Lower	Upper	Lower	Upper	Air	Oxyge
Acetone	2105		700	568	2.5					
Acetylene	2400	3140	335	350	2.5	13.0	1		46	
Acrylonitrile	2444		-		4.6	52.3	3.5	89.4	266	2480
Ammonia	1				ALC: 100 PM				43	
Amyl alcohol			409	390	15.5	27.0	13.5	79.0		
Aniline			770	530	1.2				İ	
Benzene	2290		740	662						
п-Butane	1895	2900	490	1.3-33	1.2	9.1			40	
1-Butene	1930	2000	450	460	1.9	8.4			83	
Carbon disulfide			1		1.8	12.0			43	
Carbon monoxide	1960	2600	040	12000	1.2	73.0			49	
Cyanogen	,,,,,,	4500	610	590	15.7	70.9	16.7	93.5	60	250
Сусіоргорале	2310	4500	1		6.6	42.6		20.0	00	250
Decane	2265				2.4	10.4	2.5	63.1	50	270
Diethyl ether	2235		463	202	0.6	5.4		05.1	1	
Ethane	1895		343	178	1.8	36.5	2.1	82.0	37	
Ethene			530	500	4.2	9.5	4.1	50.5	40	
Ethyl alcohol	1975		540	485	4.0	28.6	2.9	79.9	86	
lexane	0000		558	425	3.3	18.9	2.3	19.9	67	
dydrogen	2220		487	268	1.3	8.6				
lydrogen sulfide	2045	2660	530	450	9.5	65.2	9.4		40	
sopropyl alcohol				į	4.3	45.5	9.4	91.6	440	1140
Methane			590	512	1.7	-5.5				
Methyl alcohol	1875	2680	645	645	6.3	11.9	6.5		34	
latural gas	029901 331	1		555	6.7	50	0.5	59.2	70	
entane	1700-1910	2740	560	450	9.8	24.8	10.0	1	49	
горапе	2230	1			1.3	4.9	10.0	73.6	55	
	1925	2850	510	490	2.4	9.5			40	
ropene	1935	i			2.2	12.1	1200	- 1	43	390
ropyl alcohol		- 1	505	445	2.2		2.1	52.8	43	
ојиеле	2325	1	810	552	1.0	13.5 7.3				
	Fluorin					7.3	1.3	6.8	37	
ydrogen	4030					1				
	Nitrous ox	ide					100	310 004		
etylene	2800									
drogen	2690							1000	160 190	



FROM THE DESK OF J. RANDALL LYMAN PRETREATMENT COORDINATOR PUBLIC WORKS DEPARTMENT CITY OF SPRINGFIELD 1216 W. NICHOLS ST. SPRINGFIELD, MISSOURI 65802 PHONE 417-864-1487 Fax 417-864-1918

Date: August 5, 1999 (2:04PM)

To: Robert W. Collier, M.D., 119 N. 12th St., Oakdale, La. 71463-2638

Re: 3326 W. Grand

cc: Ed Malter, Bob Schaefer, Bob Corson, file

Please find a copy of our memorandum enclosed regarding our findings at your property located at 3326 W. Grand. We would recommend that you have your plumber seal the 'drain' in the basement that may lead to an abandoned septic tank. My department, Public Works, has done everything within the scope of our area of responsibility that we know to do in relation to this problem. I have referred the problem back to Mr. Karl Barke of the Health Dept. I believe you have contacted Mr. Barke at 417-864-1086 recently. You should direct any questions from this point on to Mr. Barke. If you have any questions regarding our completed investigation, please let me know. My phone number and address is listed above.

C:\MyFiles\3326WGRAND2.wpd





TO: BILL APPLEGATE / KEN EDDINGTON

C. U. Of:

8773 Fax:

8485 Phone:

 λ , including this cover sheet. Pages:

8/10/99 Date:

UPDATE! Randy

From the desk of...

J. Randall Lyman Pretreatment Cooordinator City of Springfield, Mo. 1216 W. Nichols St.

> Springfield, Mo. 65802 phone 417-864-1487 fax 417-864-1918

3326 W. GRAND

EL MARTER BOB SCHAEFER

SWIP

PW-ADM.

891-1609 1929

EXT. 12/ 1920 Phone: 891-1600

Pages: 4, including this cover sheet.

Date: \$\\\ 2/49

FY.T.

DO WE NEED TO PROCEED PURTHER ON THIS? WHO SHOULD HONDLE THis ? Dandy

From the desk of ...

J. Randall Lyman Pretreatment Cooordinator City of Springfield, Mo. 1216 W. Nichols St.

> Springfield, Mo. 65802 phone 417-864-1487 fax 417-864-1918

3326 W. GRAN

Public Works Department

Surveillance Enforcement and Billing Sewer Maintenance 1216 W. Nichols Springfield, MO 65802

Phone: 417/864-1923 Fax: 417/864-1918

Pages to follow:



Date:	7/29/99 FOX#: 891-1609
To:	Ed MARTER
From:	R. Cyman
Message:	FYI. ANY SUGGESTIONS WIRLOMED!
	R

CITY of SPRINGFIELD

5

TO: BOB SZHAEFER/ED MANTER

of: PW-ADM

Fax: 1929/1983

Phone: 1920 /1910

Pages: 6, including this cover sheet.

Date: 7/29/99

PYI. ANY Suggestions?

From the desk of...

J. Randall Lyman Pretreatment Cooordinator City of Springfield, Mo. 1216 W. Nichols St.

> Springfield, Mo. 65802 phone 417-864-1487 fax 417-864-1918

3326 W. Gens

Memo

To: Randy Lyman

From: Bob Corson
Date: July 30, 1999

Subject: Inspection - 3326 W. Grand

cc: Ed Malter, Bob Schaefer, Wayne Latimer, Karl Barke, file

In response to your memo dated July 29, 1999, Gene Pabst, Scott Hale, Bill Jones and myself inspected this residence at 2:00 pm on July 29, 1999.

After reviewing maps for the area we located sewer manhole # 6 map P16 NW. This manhole is approximately 40 ft. from the house. Inspection of this manhole revealed a 4" pipe, approximately 6 ft below the top of the manhole, entering the manhole from the south. There was flow coming from the pipe. It appeared that this was the house connection so we chose to do a dye test to see if the house was connected. I contacted the resident, identified myself and ask if we could check to see if the house is connected to sewer by performing the dye test. She said that someone was taking a shower and after she was finished I placed the dye in the stool in the main bath and flushed the stool six times. After ten minutes no dye had appeared from the connection we decided to smoke the line. Scott Hale and Bill Jones operated the a smoke machine and Gene Pabst and myself looked for smoke from the house plumbing. No smoke was observed. When the smoke machine was remove from the manhole we notice that the blue dye was now coming out of the house connection. At lease twenty minutes had elapsed since the dye was flushed. Based upon the fact that no smoke appeared and the length of time the dye took to appear it is our feeling that the private line probably has a low area were the line is completely full of water which would not allow the smoke to travel up the line and probably increases the flow time from the house to the city sanitary.

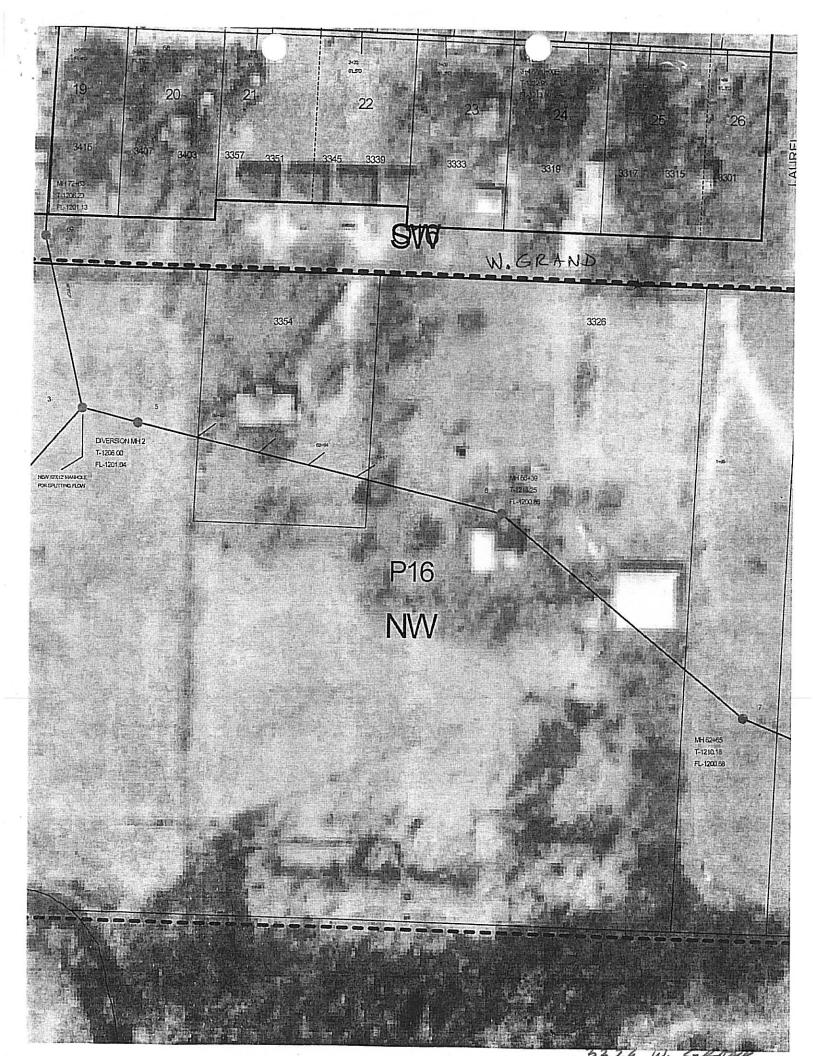
The basement is located under the kitchen and covers an area approximately 10 ft by 10 ft. The crawl space under the rest of the house is open to the basement. Construction consists of concrete floor with rock walls. The is a sump located next to the entrance in the southwest corner. Access to the basement is by an outside stair on the south side of the house which had been covered with a sheet of plywood and nailed in place by the fire department. Located in the basement are a water heater and furnace.

3326 W. Grand July 30, 1999 Page 2

Inspection of the house plumbing revealed that the main bath is served by a 4" cast iron line which exits the crawl space under the bath on the south side of the building. There is a clean-out on this line approximately 3 ft from the building. The kitchen and laundry room are served by a separated line which exits the building through the south wall of the basement via a 2 " galvanized pipe. This pipe exits the basement approximately five feet above the basement floor. The plumbing from the sump is connected to the house sewer line from the kitchen but there is no sump pump. The "drain" in the floor was still sealed with duct tape. This "drain" does not appear to be tributary to the sanitary sewer that serves the house in that it is five feet lower than the sanitary sewer pipes. Because of the condition of the crawl space we were not able to visually inspect all the plumbing under the house.

To test the atmosphere in the basement I used a phD Ultra Atmospheric Monitor by Biosystems, Inc. This meter tests for oxygen, carbon monoxide, hydrogen sulfide and lower explosive limit. As I entered the basement door I observed that the oxygen readings begin to fall and within twenty seconds had reached 19.2% and the meter begin to alarm. At the time I was only just inside the doorway. The meter was approximately belt high. I exited the basement immediately and noted that the oxygen reading had fallen to 17.2%. All other parameters remained at 0 readings. Once outside the oxygen readings returned to a normal level of 20.9%. During the short time I was in the basement I detected no sewer odor. The basement had that stuffy, close earthy odor with little or no air movement. Gene Pabst, Scott Hall and Bill Jones also enter the doorway of basement and observed the same conditions and oxygen readings. Gene and I place the sheet of plywood back over the stairway and nailed it in place.

Based upon the conditions observed at the time of my inspection it does not appear that the lack of oxygen in the basement is related to the house being connected to the city sanitary sewer. It is my opinion that the owner of the property should determine what is causing the lack of oxygen in the basement and remedy the situation so the tenants can used the water heater and furnace.



0845-2270-39 PRANGE KEVIN LY 3326 W GRAND 65802 SEWER PRESENT CODE Y RATE CODE 10	
I	
METER NUMBER 0 CHANGE DATE 10/16/92	
CURRENT AMOUNT \$12.88 BASE 6	
SEWER USE 32 PERCENT ACTUAL .000	
PROPATE PERIOD 1.0 B O D	10
SUSPENDED SOLIDS INPUT USE	
SEWER CHANGE USE TAX LOCATION Springfield	
SEWER HISTORY	
USE AMOUNT	
20 \$12.88	
6 \$8.21	
0 \$.00	
0 \$.00	
0 \$.00	
0 \$.00	
18 \$.00	
13 \$16.28	
16 \$16.28	
24 \$16.28	
23 \$16.28	147
22 \$16.28	
710.20	ļ

1	· L	084	522	703	90	CY	10	BK	45	5	
	0.84	5-2	270	-39	PF	RANG	ξE	KEV]	N	LYN.	

3326 W GRAND

729/99 10:00:14 65802-5203 PUBLISH: YES

· ·		
ACCOUNT STATUS	01	INITIAL DATE 4/27/99
SVCS PRES 11 21 31 00 00	00 00 SW	NUMBER OF ACTIVE SERVICES 3
NUMBER SVCS SIGNED FOR	3	AUTOMATIC CONN CODE
SPECIAL HANDLING CODE		PENALTY INHIBIT CODE
PREVIOUS CHANGE TYPE	052	PREVIOUS CHANGE DATE 7/20/99
TRANSFER AMOUNT	\$.00	TAX CLASS CODE 0
MAINTENANCE DATE	4/28/99	TRANSFER FROM ACCT NO 0148-2045-50
NO AUTO DISCONNECTS	0	TAX LOCATION Springfield
CURRENT ACCOUNT ENTRY		TRNSF FNL AMT TO ACCTNO
CURRENT AEF DATE	5/1999	MAP NUMBER SWC05
CURTAILMENT CODE	3	MOMAT AGGGETT TOTAL
	117 869-2776	S I C 30.00
		SOCIAL SECURITY NUMBER 500-90-4002 PAGER, MOBILE, MSG. #

ROUTE

D